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west virginia department of environmental protection

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Division of Water & Waste Management  
601 57<sup>th</sup> Street SE  
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Earl Ray Tomblin, Governor  
Randy C. Huffinan, Cabinet Secretary  
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August 17, 2015

Kristin Edwards  
Virginia Electric & Power Co.  
Mt. Storm Plant  
436 Dominion Blvd.  
Glen Allen, VA 26738-9

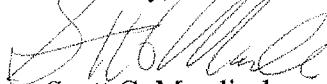
CERTIFIED RETURN RECEIPT REQUEST  
RE: WV/NPDES Permit No. WV0005525  
Order Number 8420, Amendment No. 1

Dear Ms. Edwards:

Enclosed find Amendment No. 1 to Administrative Order No. 8240, which emanated pursuant to Chapter 22, Article 11 of the West Virginia Code. This Amendment to the ORDER revises the endpoints for the qualifying BIP in Stony River. Prior to issuance of the ORDER Laurel Run Mine Outlet 001 was agreed upon as the downstream edge of the study area for the BIP; however, was inadvertently not incorporated properly. Therefore, Item No. 4 of the Order for Compliance has been revised.

You should carefully read the contents of the enclosed amended ORDER and communicate to each responsible official, agency and employee the actions which each must take to ensure compliance with its terms. Failure to comply with the terms of this amended ORDER constitutes an additional violation and may result in further enforcement action involving civil or criminal penalties. Also please note that, as indicated by its terms, the amended ORDER is effective upon receipt. If you have any questions concerning this amended ORDER or related matters, please contact John Lockhart, at 304-926-0499 ext. 1028.

Sincerely,



Scott G. Mandirola  
Director

SGM/jl

cc: Env. Insp. Supv., Env. Insp. (Grant County), USEPA Region 3



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**AMENDED ORDER  
ISSUED UNDER THE  
WATER POLLUTION CONTROL ACT  
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 11**

**TO:** Virginia Electric & Power Co.  
Mount Storm Plant  
5000 Dominion Blvd.  
Glen Allen, VA 23060

**ORDER NO.:** 8420 (Amendment #1)

**DATE:** August 17, 2015

**INTRODUCTION**

The following findings are made and amended Order issued to Virginia Electric & Power Company (herein after "permittee") pursuant to the authority vested in the Director of the Division of Water and Waste Management under Chapter 22, Article 11, Section 1 et seq. of the Code of West Virginia.

**FINDINGS OF FACT**

In support of this Order, the Director finds the following:

1. The permittee owns and operates the Mt. Storm Power Plant located in Grant County. This facility is permitted (WV/NPDES Permit No. WV0005525 issued the 30<sup>th</sup> day of June 2014) to discharge treated process wastewater, cooling water, sewage, and storm water runoff via Outlet 001 (discharge from Mt. Storm Lake) into the Stony River of the North Branch of the Potomac River.
2. Similar to the prior permit (2008 permit), the 2014 reissued permit contains temperature and temperature difference limitations at Outlet 001. These limitations are in accordance with WV water quality criteria.
3. The permittee previously applied for a 316(a) thermal variance prior to 2008, but a 316(a) thermal variance could not be granted.

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4. The permittee has been working with the West Virginia Department of Environmental Protection (WVDEP) and the United States Environmental Protection Agency (USEPA) to develop thermal controls and best management practices to meet WV water quality criteria and/or the requirements for a 316(a) thermal variance.
5. In order to qualify for a 316(a) thermal variance, the permittee must demonstrate that any thermal effluent limitations less stringent than those necessary to be protective of West Virginia Water Quality Standards as identified in 47 CSR 2 will assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the body of water into which the discharge is made.
6. Administrative Order No. 6291 was issued on the 14<sup>th</sup> day of April, 2008 to require the installation of a weir; allow the installation of a discharge control system; to install spill gateways; install a cooling system; refine lake management controls; develop an operation plan, and perform BIP studies as prescribed in the permit in order to either to meet temperature requirements in the permit or obtain a BIP such that a 316(a) variance could be obtained on or before July 1, 2014. Order No. 6291 also afforded interim relief for temperature and temperature difference limitations and also defined the specific aquatic species necessary to establish a BIP. This Order was amended five times on the 2<sup>nd</sup> day of July 2009, the 29<sup>th</sup> day of October 2010, the 27<sup>th</sup> day of June 2014, the 21<sup>st</sup> day of October 2014, and the 27<sup>th</sup> day of March 2015 to afford additional time for various requirements. The fifth amendment extended the final deadline for ultimate compliance until July 31, 2015.
7. Controls installed and implemented by the permittee have resulted in compliance with summer and winter maximum temperature limits contained within the permit.
8. Even though the permittee has studied and modeled the discharge and receiving stream, installed controls and upgrades to control the temperature, and developed new best management practices in response to the permit and enforcement action requirements since Administrative Order No. 6291 was issued in 2008; the thermal discharge from Outlet 001 still does not meet the temperature difference limitation imposed in the permit for Outlet 001 and BIP studies provided by the permittee have shown that the thermal discharge does not assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the Stony River.
9. On June 25, 2014, the permittee met with the WVDEP to discuss its current compliance status with the temperature rise limitation. At this meeting, the permittee questioned the WVDEP's interpretation of the existing temperature rise limitation in the permit and presented an alternative interpretation to its implementation.
10. On September 29, 2014, the WVDEP sent a response letter to the permittee documenting that the agency's position regarding the interpretation of the temperature rise water quality criterion remained unchanged. Additionally, the WVDEP listed potential courses of action regarding compliance within said letter.

11. Pursuant to Amendment No. 4 of Administrative Order No. 6291, the permittee submitted a Plan of Action (POA) on December 23, 2014 to address how it would come into compliance. The WVDEP discussed the POA with the permittee and indicated that it was insufficient because it did not discuss actions leading to a finite date at which compliance would be attained.
12. On February 27, 2015, the permittee submitted a review of the BIP species list prescribed in Attachment B of Order No. 6291 and requested a revision to the BIP list. In general, the permittee requested the removal of largemouth bass, channel catfish, green sunfish, and bluegill from the BIP list. Additionally, in prior discussions, it was agreed upon by the permittee and WVDEP that the greenside darter would be removed from the BIP list.
13. On February 27, 2015, the permittee submitted a Stony River Post 316(a) Sampling Plan that describes the monitoring stations; the methodology for monitoring larval and adult fish, crayfish and other benthic macroinvertebrates; the fish and crayfish reintroduction plan; and the water quality monitoring plan.
14. On June 26, 2015, the WVDEP met with the permittee to discuss the POA. The permittee informed the agency that it was pursuing the development of a thermal model in order to identify potential operational and/or lake management improvements. The WVDEP presented information regarding significant thermal spikes caused by the discharge over short periods of time which corresponded with significant changes in flow rate. Specifically, but not limited to, severe decreases in temperature associated with sudden reductions in lake discharge when ambient temperatures are low. The WVDEP emphasized that these significant changes were believed to be detrimental to any benefits obtained to the downstream aquatic life from any prior efforts from the permittee. The WVDEP also emphasized that it believed that these significant changes in flow and temperature should be addressed as soon as possible. Additionally, the WVDEP reiterated that the existing POA was insufficient because it did not discuss actions leading to a finite date at which compliance would be attained.
15. The permittee submitted a revised plan of action on June 30, 2015.
16. Actions taken by the permittee must be a means to obtaining final compliance with permit requirements. While the WVDEP understands that continued investigations and the development of models may lead to opportunities for better lake management operation and controls, the WVDEP is not requiring these investigations. The WVDEP is requiring action to be taken by the permittee that results in ultimate compliance with the requirements contained in WV/NPDES WV0005525 or results in a sustainable BIP such that the permit can be modified to contain achievable and protective requirements.
17. A final resolution must be made regarding any opportunities for improvement derived from thermal models and/or other investigations and be implemented through lake management and operational controls. If compliance cannot be attained through these avenues, then the permittee must move on to other compliance alternatives.

### **ORDER FOR COMPLIANCE**

And now, therefore, in accordance with Chapter 22, Article 11, Section 1 et. Seq. of the WV Code, the permittee is hereby ORDERED to do the following:

1. The permittee shall immediately take measures to initiate compliance with all terms and conditions of WV/NPDES Permit No. WV0005525.
2. The permittee shall adhere to the compliance schedule found in Attachment A of this Order.
3. The permittee shall be required to reintroduce fish and crayfish species from the Balanced Indigenous Population (BIP) list (see Attachment B) as described in the Sampling Plan provided on February 27, 2015. This shall be coordinated with the WVDNR and implemented in the Stony River on an annual basis during the months of April through October. The elimination of predator species shall be done only with the consultation and approval of WVDNR. Success for a 316(a) demonstration will be measured by the presence of a sustaining BIP, including evidence of reproduction. Success shall also be determined by the biological integrity of Stony River by collection and identification of benthic macroinvertebrates in accordance with the West Virginia Stream Condition Index (WVSCI) protocol. The WVDEP recognizes that impoundments influence filter feeder abundance and that the benthic community in Stony River may not achieve as high a WVSCI score as an otherwise similar, but unimpounded stream. Sampling for fish and benthos shall be conducted in accordance with the requirements contained in the permit and as described in the February 27, 2015 Sampling Plan.
4. Final temperature difference limit means an instantaneous maximum temperature difference limitation of 5° F. Interim temperature difference limit means monitor only until October 1, 2018. The permittee shall comply with the final temperature difference limitation or the resultant limitation from a granted 316(a) variance from a modified permit at Outlet 001 as soon as possible but no later than October 1, 2018. Until that time, the permittee shall comply with the interim temperature difference stream limitation at Outfall 001. In order to qualify for a 316(a) variance, the permittee must have attained a sustaining BIP in the Stony River between the weir and the confluence with Laurel Run Mine Outlet 001 in order to request a modification to the permit.
5. The permittee shall operate and maintain an online FTP site which identifies real-time and historical continuous temperature and discharge data from the weir on the Stony River. Continuous data shall be defined as data collected at a frequency of at least once every hour. Continued and uninterrupted access to the FTP site and the data shall be made available by the permittee to WVDEP personnel. Current and historical data shall also be made retrievable for download by WVDEP personnel on the FTP site. Any problems with the FTP site shall be fixed in a timely manner.

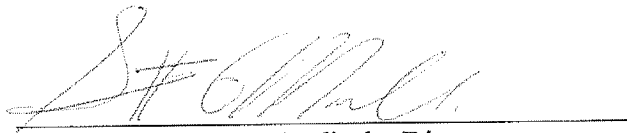
### **OTHER PROVISIONS**

1. Compliance with the terms and conditions of this Order shall not in any way be construed as relieving the permittee of the obligation to comply with any applicable law, permit, other order, or any other requirement otherwise applicable. Violations of the terms and conditions of this Order may subject the permittee to additional enforcement action in accordance with the applicable law.
2. The provisions of this Order are severable and should a court or board of competent jurisdiction declare any provisions of this Order to be invalid or unenforceable, all other provisions shall remain in full force and effect.
3. This Order is binding on the permittee, its successors and assigns.
4. This Order shall terminate upon the permittee's notification of full compliance with the "Order for Compliance" and verification of this notification by WVDEP.

### **RIGHT OF APPEAL**

Notice is hereby given of your right to appeal the terms and conditions of this Order which you are aggrieved to the Environmental Quality Board by filing a NOTICE of APPEAL on the form prescribed by such Board, in accordance with the provisions of Section 21, Article 11, Chapter 22 of the Code of West Virginia within thirty (30) days after receipt of this Order.

This Order shall become effective upon receipt.

  
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Scott G. Mandirola, Director  
Division of Water and Waste Management

SGM/mls/jvl

cc: Env. Inspector  
Env. Insp. Supervisor  
EPA Region III

**ATTACHMENT A**  
**ORDER No. 8420 - Compliance Milestones**

<b>Compliance Date</b>	<b>Compliance Requirements</b>
10/31/2015	The permittee shall have finalized the evaluations and development of a thermal model in order to determine opportunities for the reduction of thermal shifts from the discharge (this includes discharge temperature and flow).
11/30/2015	The permittee shall submit a report to the agency based upon a final evaluation of opportunities to improve mixing in the stilling basin along with a final determination of those opportunities to be implemented by the permittee. The permittee shall commence implementation of the opportunities identified in the report.
3/31/2016	The permittee shall submit a final report to the agency that identifies areas for better lake management operations and controls as concluded from the permittee's thermal model. The permittee shall also have developed a revised Operational Plan based on these identified significant areas and shall submit said Plan to the agency. The permittee shall commence implementing the revised Operational Plan.
3/31/2016	<p>Notwithstanding any other milestone requirement in this Order, the permittee shall specifically submit and begin implementing a corrective action plan that identifies: the causes of significant temperature shifts in the discharge from Outlet 001; the frequency and duration of significant temperature shifts in the discharge; and the tasks to be taken by the permittee to eliminate these significant temperature shifts. The identified tasks to eliminate significant temperature shifts shall begin to be implemented.</p> <p>For the purpose of this requirement, significant temperature shifts are identified as any changes in temperature that are equal to or greater than 10°F over any timeframe up to and including a 24 hour period.</p>
1/1/2017	Submit a progress report for recent activities conducted by the permittee for the purposes of obtaining final compliance to the agency.
7/1/2017	Submit a progress report for recent activities conducted by the permittee for the purposes of obtaining final compliance to the agency.
1/1/2018	Submit a progress report for recent activities conducted by the permittee for the purposes of obtaining final compliance to the agency.
10/1/2018	Comply with the final temperature difference limitation at Outlet 001 and/or obtain an approved 316(a) variance.

## **ATTACHMENT B**

### **ORDER No. 8420**

#### **Balanced Indigenous Population List**

1. Central Stoneroller
2. Spotfin Shiner
3. Blacknose Dace
4. White Sucker
5. Creek Chub
6. Fantail Darter
7. Northern Hogsucker
8. Smallmouth Bass
9. Native Crayfish